

PATENT

CASE NO. 56/414

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re	Application:	)
Norbe	ert Huber et al.	)
		) Group Art Unit: 2836
Serial	No.: 10/656,924	)
Filed:	September 5, 2003	) Examiner: unassigned )
For:	CHARGING CIRCUIT FOR A FREQUENCY CONVERTER	)

## **INFORMATION DISCLOSURE STATEMENT**

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In compliance with Applicants' duty of disclosure under 37 C.F.R. § 1.56 and in conformance with 37 C.F.R. §§ 1.97-1.98, Applicants hereby submit the following references for consideration by the Examiner. Copies of the references are enclosed along with a completed copy of Form PTO-1449.

# I. <u>DISCLOSURE</u>

## A. <u>U.S. Patents</u>

Patent No.	Inventor	Issue Date
6,388,906 B1	Ferstenberg	05/14/02
6,603,672 B1	Deng et al.	08/05/03

# B. <u>U.S. Patent Application Publications</u>

Publication No.	Inventor	Publication Date
2003-0067303	Huber et al.	04/10/03

# C. Foreign Patent References

Reference No.	Country	<b>Publication Date</b>
195 08 348 A1	Germany	09/12/96
197 41 300 A1	Germany	03/25/99
101 55 182 A1	Germany	05/29/02
101 48 740 A1	Germany	04/17/03

# II. <u>DISCUSSION</u>

## A. <u>U.S. Patent No. 6,388,906</u>

The '906 patent reference was cited as an X-type reference in a Search Report for corresponding German patent application 102 41 036.4. An X-type reference is pertinent when taken alone.

## B. German Reference No. 195 08 348

Based solely on the drawings and the enclosed English language abstract, the '348 patent reference is pertinent because it appears to disclose a bridge rectifier network having three

thyristors, controllable by a pulse generator, and three uncontrolled diodes. The '348 patent reference was cited as an A-type reference in a Search Report for corresponding German patent application 102 41 036.4. An A-type reference is not considered pertinent to patentability and provides technical background.

## C. German Reference No. 197 41 300

Based solely on the drawings and the enclosed English language abstract, the '300 patent reference is pertinent because it appears to disclose a circuit arrangement to charge a condenser for a converter containing a fan motor with at least one motor winding assigned to at least one rectifier branch. The '300 patent reference was cited as an A-type reference in a Search Report for corresponding German patent application 102 41 036.4.

## D. German Reference No. 101 55 182

Based solely on the drawings and the enclosed English language abstract, the '182 patent reference is pertinent because it appears to disclose a system that has two power conversion stages, one stage selectively rectifies a signal and the other stage selectively modifies the frequency of the signal. It is believed that U.S. Patent No. 6,603,672 corresponds to the '182 patent reference. The '182 patent reference was cited as a Y-type reference in a Search Report for corresponding German patent application 102 41 036.4. A Y-type reference is pertinent when combined with one or more Y-type references.

## E. German Reference No. 101 48 740

Based solely on the drawings and the enclosed English language abstract, the '740 patent reference is pertinent because it appears to disclose a method for fault monitoring for a power rectifier drive, wherein a switch for connecting a current rectifier to a voltage source is only

activated when the potential of a capacitor terminal changes by a preset amount. It is believed

that U.S. Patent Application Publication No. 2003-0067303 corresponds to the '740 patent

reference. The '740 patent reference was cited as an A-type and D-type reference in a Search

Report for corresponding German patent application 102 41 036.4.

III. CONCLUSION

It is believed that none of these references, alone or in combination, disclose or suggest

the invention claimed. However, Applicants wish to make it clear that the disclosure of the

above references is in no way an admission that they qualify as prior art. It is Applicants' desire,

however, to have these references available in the record for both the Examiner and the public to

see. Applicants therefore request that the Examiner review the entire disclosure of each

reference and make the above-listed references of record.

Respectfully submitted,

John C. Freeman

Registration No. 34,483

Attorney for Applicants

**BRINKS HOFER** GILSON & LIONE P.O. Box 10395 Chicago, Illinois 60610 (312) 321-4200

Dated: December 23, 2003

4

FORM PTO-1449	SERIAL NO.	CASE NO.
	10/656,924	56/414
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE	GROUP ART UNIT
APPLICANT'S INFORMATION DISCLOSURE	September 5, 2003	2836
STATEMENT		
(use several sheets if necessary)	APPLICANT(S): Norbert Huber	et al.

#### REFERENCE DESIGNATION

#### **U.S. PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (If known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	A1	6,388,906 B1	05/14/2002	Ferstenberg		
	A2	6,603,672 B1	08/05/03	Deng et al.		

#### REFERENCE DESIGNATION U.S. PATENT APPLICATION PUBLICATIONS

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (If known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	A3	2003-0067303	04/10/03	Hubert et al.		

#### **FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO
	A4	195 08 348 A1	09/12/1996	Germany	√4 :	Yes
	A5	197 41 300 A1	03/25/1999	Germany	4.5	Yes
	A6	101 55 182 A1	05/29/2002	Germany		Yes
	A7	101 48 740 A1	04/17/2003	Germany	4,	Yes

EXAMINER	OTHER ART – NON PATENT LITERATURE DOCUMENTS
INITIAL	(Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial,
	symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.

EXAMINER	DATE CONSIDERED
<u> </u>	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Rev. Dec.-99

	TRANSMITTAL LETTEI	R	Case No. 56/414	
Serial No.	Filing Date	Examiner	Group Art Unit	
10/656,924	September 5, 2003	Unassigned	2836	
Inventor(s)				
Norbert Huber et al.				
Title of Invention				
CHARGING CIRCUIT FO	OR A FREQUENCY CONVERTER			

citad safe						_			
cited tell	Fransmitted here erences; Postcard			duplicate); Informati	ion Disclosure S	tatement; P	TO 14	49 along with	seven
	Small entity sta	itus of this	application unde	er 37 CFR § 1.27	has been esta	blished by	verifie	d statement p	orevio
	Applicant claims	small entity	status. See 37 (	CFR1.27.					
	Petition for a	month e	extension of time.						
	No additional fee	e is required.							
	The fee has been	n calculated	as shown below:						
					S-mail	Ensis.		Other	
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Small	Add'I Fee	or	Small	Add
Total		Minus			x \$9=		1	x \$18=	
Indep.		Minus			x 43=	,		x \$86=	
First Pres	sentation of Multip	le Dep. Clair	m		+ \$145 =			+ \$290 =	
			•		Total add'l fee	\$		Total add'l fee	\$
لــا				(BRINKS HOFER GI	ILSUN & LIUNE,	in the am	ount of	· » A	aupiid
	A check in the a	_	to cover the	e filing fee is enclose	ed.	ı fees requi	red up	dar 37 CER 8	1 16
	A check in the a	mount of \$_ er is hereby cation proces	to cover the authorized to chassing fees under 3	e filing fee is enclose arge payment of any 37 CFR § 1.17 assoc e copy of this sheet i	ed. y additional filing ciated with this o				
	A check in the all The Commission any patent applic to Deposit Accounts	er is hereby cation procesunt No. 23-1 under 37 (by associated	to cover the authorized to che ssing fees under 3 925. A duplicate CFR § 1.136(a) f	arge payment of any 37 CFR § 1.17 assoc	ed. y additional filing ciated with this d is enclosed. f time required	communicat	tion or that thi	credit any ove	rpaym ely fi
	A check in the all The Commission any patent applic to Deposit Accounts I hereby petition Please charge an	er is hereby cation procesunt No. 23-1 under 37 (by associated	to cover the authorized to che ssing fees under 3 925. A duplicate CFR § 1.136(a) f	arge payment of any 37 CFR § 1.17 assoc copy of this sheet for any extension of	ed.  y additional filing ciated with this cis enclosed.  f time required paid to Deposit ubmitted,  an  o. 34,483	communicat	tion or that thi	credit any ove	rpaym iely fi
BRINKS I P.O. BO)	A check in the au The Commission any patent applic to Deposit Accou I hereby petition Please charge an of this sheet is e  HOFER GILSON & (10395) D, ILLINOIS 60610	er is hereby cation proces unt No. 23-1 under 37 (by associated nclosed.	to cover the authorized to che ssing fees under 3 925. A duplicate CFR § 1.136(a) f	arge payment of any B7 CFR § 1.17 association of this sheet in a copy of this	ed.  y additional filing ciated with this cis enclosed.  f time required paid to Deposit ubmitted,  an  o. 34,483	to ensure t Account N	tion or that thi o. 23-1	credit any over	rpaym iely fi
BRINKS I P.O. BOX CHICAGO (312) 32 I hereby cert first class m	A check in the au The Commission any patent applic to Deposit Accou I hereby petition Please charge an of this sheet is e  HOFER GILSON & (10395) D, ILLINOIS 60610	er is hereby cation processunt No. 23-1 in under 37 (by associated nolosed.	to cover the authorized to chassing fees under 3 925. A duplicate CFR § 1.136(a) for the second seco	Respectfully suddense Postal Service as	ed.  y additional filing ciated with this cis enclosed.  f time required paid to Deposit ubmitted,  an  o. 34,483 pplicant	to ensure t Account N	tion or that thi o. 23-1	credit any over	rpaym ely fi